

Supplement
to
500
POKES
PEEKS 'N EXECS
FOR THE
TRS - 80 COLOR COMPUTER

Kishore M. Santwani

Supplement
to
500
POKES
PEEKS 'N EXECS
FOR THE
TRS - 80 COLOR COMPUTER

SUPPLIED BY
PARIS RADIO ELECTRONICS
161 BUNNERONG RD KINGSFORD 2032
P.O. BOX 380 DARLINGHURST 2010
PH: 344-9111

Kishore M. Santwani

SUPPLEMENT
TO
500
POKES
PEEKS 'N EXECS
for the
TRS-80 COLOR COMPUTER

by
Kishore M. Santwani

(C) 1986 MICROCOM SOFTWARE
PO BOX 214
FAIRPORT, NY 14450
PH: (716)223-1477

ALL RIGHTS RESERVED. The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, downloading, storage in an information retrieval system, or otherwise, without the written permission of the publisher.

Printed in the United States of America

First Printing August 1986

Second Printing April 1987

Every effort has been made to insure the accuracy of the contents of this book. Microcom Software does not guarantee the accuracy of the information contained in this book, nor does it assume any liability arising out of the application or the use of the information herein.

TRS-80 is a trade mark of the Tandy Corporation.

C O N T E N T S

Preface	v
How to Use the Book	vi

CASSETTE ONLY & CASSETTE 'N DISK COMMANDS

Save Text/Graphics Screen to Cassette	1
Disable LIST Command	1
List Contents of Data Files	2
Speed Up Rompaks	3
Restart your program when RESET is pressed	3
Single Screen LIST / DIR	4
Relocate video display	4
Reverse text/graphics screen	4
Slow character printing rate	4
Restore ?IO ERROR based Cassette Basic Programs ..	5
High Speed Cassette Operation	5

PRINTER

Set Printer Baud Rate	6
Use your Printer with High Speed Poke	6
Define the Right Margin for your printer	7
Perforation Skip Routine	8
Text Screen Dump	8
Graphics Screen Dump	9

FOR 64K COMPUTERS ONLY

RESET protection for ALL RAM MODE	10
Invisible Cursor	10
Scroll Protect Routine	11
Create an EXTENDED BASIC ONLY system	11
NEW Command with SURE? prompt	12
ML Program Autostart from Cassette	12
Hide and Recall Graphic Screens	12
Enhanced CLOAD / CLOADM Command	12
PAINT with 65000 styles	13
Rompak Pokes	13
Rompak Transfer to Disk	14
Variable Step Rates for disk drives	15
Use of double sided drives	16
Use of 40 track drives	16

ML Program Autostart from disk	18
DSKINI Enhancement	18
LOAD those 'Cassette Only' Basic Programs	
from disk	19

DISK SYSTEMS

Save Text/Graphics Screen to Disk	20
Find Length of Basic Programs on disk	21
Find EXEC address of disk-based ML Programs	21
Find START/END addresses of disk-based	
ML Programs	21
Protection for Basic Programs	21
Search for filename in Directory	22
Disk Verification Routine	23
Restart your program when RESET is pressed	23
Keep a spare copy of disk directory	23
Restore Directory in case disk crashes	24
Protection for all your programs on disk	24

ENHANCEMENTS

EDTASM+ Enhancements	25
CoCo Max Enhancements	25
Telewriter - 64 Enhancements	26

GAMES	29
-------------	----

PATCHES FOR COCO III

4TH COMMAND ON PAGE 3 SHOULD READ AS FOLLOWS:

COMMAND: CLS: ?20, "NO": POKE 65497, 0: ?20, "YES"

5TH COMMAND FROM TOP ON PAGE 3:

Replace POKE 65495, 0 with POKE 65497, 0

Replace EXEC 49152 with EXEC &HE010

LAST COMMAND ON PAGE 3 IS INCOMPATIBLE WITH COCO 3.

* NOTE: DO **NOT** SET THE 64K ALL RAM MODE BEFORE USING ANY COMMANDS LISTED UNDER THE 'FOR 64K COMPUTERS ONLY' SECTION.

TOP COMMAND ON PAGE 12 SHOULD READ AS FOLLOWS:

COMMAND: POKE &HAD19, 126: CLEAR 200, 32740: POKE &HAD1A, &H7F: POKE &HAD1B, &HE4: FOR I=32740 TO 32740+&H1D: READ A\$: POKE I, VAL("&H"+A\$): NEXT: DATA 8E, 7F, FB, BD, B9, 9C, BD, A1, B1, 81, 59, 26, 07, 9E, 19, 6F, 80, 7E, AD, 1D, 7E, AD, 33, 20, 53, 55, 52, 45, 3F, 00

2ND COMMAND FROM TOP ON PAGE 12, FIRST LINE SHOULD READ AS:

CLEAR 200, 32700: POKE &HA53C, &H7F: POKE &HA53D, &HBC: FOR I=32700 TO 32705:

3RD, 4TH & 5TH COMMANDS FROM TOP ON PAGE 12 ARE INCOMPATIBLE WITH III.

LAST COMMAND N PAGE 12, FIRST 2 LINES OF COMMAND SHOULD READ AS:

CLEAR 200, 32670: POKE &HA69B, &HFA: POKE &HA6C7, 126: POKE &HA6C8, &H7F: POKE &HA6C9, &H9E: FOR I=32670 TO 32670+&H15: READ A\$: POKE

1ST COMMAND ON PAGE 13, 1ST LINE OF COMMAND SHOULD READ AS:

CLEAR 200, 32590: POKE &H99FF, 127: POKE &H9A00, &H4E: FOR I=32590 TO 32658:

ROMPAK TRANSFER TO DISK (PAGE 14)

Use CLEAR 200, 16384: CLOADM "FILENAME" instead of CLEAR 200, 16384: CLOADM "FILENAME", &H8000. Instead of modifying Lines 140 & 150 of Program Listing 1, modify Line 110 of Program Listing 2 as follows:

110 INPUT "FILENAME": FI\$: LOADM FI\$: POKE &HFF40, 0: EXEC 3584

PATCHES FOR COCO III (contd.)

3RD COMMAND FROM TOP ON PAGE 18. 1ST LINE SHOULD READ AS:

CLEAR 200,32500:POKE &HCF1C,&HAF:POKE &HCF1D,&HD6:FORI=32500 TO 32508:

4TH COMMAND FROM TOP ON PAGE 18. 1ST LINE SHOULD READ AS:

CLEAR 200,32500:POKE &HCFF8,&HAE:POKE &HCFF9,&HFA:FORI=32500 TO 32508:

7TH COMMAND FROM TOP ON PAGE 18. 1ST 2 LINES SHOULD READ AS:

CLEAR 200,32400:POKE &HD625,126:POKE &HD626,126:POKE &HD627,&H90:
FORI=32400 TO 32415:READ A\$:POKE I,VAL("&H"+A\$):

PROCEDURE ON PAGE 19

Follow the same steps except do NOT set the 64K ALL RAM MODE.

2ND, 3RD & 5TH COMMANDS ON PAGE 23 ARE INCOMPATIBLE WITH COCO III

*** HIGH SPEED CASSETTE OPERATION ***

Before loading or saving programs, TYPE: POKE 65497,0. This will allow you to LOAD and SAVE programs at high speed. Use POKE 65496,0 for regular speed.

P R E F A C E

Our book, '500 POKES PEEKS 'N EXECs for the TRS-80 COLOR COMPUTER' was very well received by the CoCo Users. In a short span of two years, this book has seen four reprints and has been widely acclaimed by CoCo Users. Hence, the author decided to continue the good work and compose this supplement.

The SUPPLEMENT TO 500 POKES PEEKS 'N EXECs includes commands to give you even more power of Assembly Language through Basic. It includes commands like Rompak Transfer to Disk, PAINT with 65000 styles, Use of 40 track drives, High Speed Cassette Operation and Printer Routines such as Text and Graphic Dumps. You will also need the 500 PEEKS 'N EXECs to be able to effectively use this supplement.

We shall be glad to receive your views on the book and any changes/additions to be made to make it even more useful.

GOOD LUCK!!

HOW TO USE THE BOOK

The SUPPLEMENT TO THE 500 POKES PEEKS 'N EXECs for the TRS-80 COLOR COMPUTER has been prepared in a style that can be easily followed by a neophyte as well as a professional programmer. It follows a logical sequence of major groups based on different systems - Cassette Only & Cassette 'N Disk Commands, Printer, 64K Computers Only and Disk Systems. An exhaustive Table of Contents has been included to help you locate the major commands in the book.

TYPING IN THE COMMANDS

Before typing in any COMMAND, please read it ensuing RESULT and REMARKS. This will give you a better understanding of the COMMAND and whether or not it can be used with your particular system.

If the COMMAND is a PEEK, for example: PEEK (244), precede it with a PRINT command. For example, PRINT PEEK(244) and press <ENTER>. The computer will return (or display) a value. Then read the RESULT and REMARKS to understand what that particular value stands for. If you wish to use the PEEK command in a Basic Program, you may precede it with a variable, for example: A=PEEK(244):IF A=2 THEN ...

If the COMMAND contains any DATA statements, it must be preceded by a statement number. For example, if the command reads: FOR I=1024 TO 1025:READ A:POKE I,A:NEXT:DATA 42,22, you would type it as: 10 FOR I=1024 TO 1025:READ A:POKE I,A:DATA 42,22. Then, type RUN to achieve the RESULT. If you do not precede such commands with a statement #, you will get an ?OD ERROR. If you wish to use any of the commands with DATA statements in your Basic Programs, make sure they are placed in the BEGINNING of your program. Always make a BACKUP of the programs that contain POKES, PEEKs and EXECs as a slight error can wipe out your entire program.

Before using any Printer Routines, such as Perforation Skip, make sure the appropriate printer baud rate is set. If you are using any of the commands listed under the 'FOR 64K COMPUTERS ONLY' section, make sure you have typed in and RUN the 64K ALL RAM MODE program from Page 61 of our 500 POKES PEEKS 'N EXECs book. The COMMANDs listed in this section will not work unless the computer is in the ALL RAM MODE. The COMMANDs for EDTASM + (R), COCO MAX (R), and TELEWRITER - 64 (R) and the various arcade games should be used with the particular programs.

CASSETTE ONLY & CASSETTE 'N DISK COMMANDS

COMMAND: POKE 25,PEEK(188):POKE PEEK(25)*256,0:NEW

RESULT: Performs a PCLEAR 0

REMARKS: Provides maximum memory for Basic Programs. Does not allow the use of graphics. Clears any Basic Program in memory

COMMAND: POKE 159,0

RESULT: Disables all functions/commands

REMARKS: * WARNING * Save any programs before using this POKE

COMMAND: CSAVEM "filename",1024,1535,PEEK(114)*256+PEEK(115)

RESULT: Saves the current text screen to cassette

REMARKS: Use CLOADM "filename" to load screen from cassette

COMMAND: CSAVEM "filename",PEEK(186)*256,PEEK(183)*256,44539

RESULT: Saves a graphics screen which is in memory to cassette

REMARKS: Use CLOADM "filename" to load screen from cassette

COMMAND: INT ((PEEK(223)-128)/4)+1

RESULT: Returns the volume of the most recent PLAY statement

REMARKS: For example, returns 27 in PLAY "V27"

COMMAND: FOR I = 338 TO 345:POKE I,255:NEXT I

RESULT: Improves keyboard reponse in some Basic Programs

REMARKS: This command should be added to precede any PEEK between PEEK (338) to PEEK(345) in the program

COMMAND: POKE 359,12

RESULT: Allows the use of graphics screens and 'SCREEN 0,1' without returning to normal text screen

REMARKS: Not compatible with Disk System

COMMAND: POKE 359,126

RESULT: Recovers from POKE 359,12

REMARKS: None

COMMAND: POKE 383,158

RESULT: Disables the LIST COMMAND

REMARKS: LIST command produces garbage

COMMAND: POKE 383,126

RESULT: Restores LIST command after POKE 383,158

REMARKS: None

COMMAND: POKE 383,158

RESULT: Disables the DIR + LIST commands in Disk

REMARKS: DIR command produces garbage

COMMAND: POKE 383,126

RESULT: Restores the DIR + LIST commands in Disk

REMARKS: None

COMMAND: EXEC 41393

RESULT: Flashes cursor and waits for a keystroke

REMARKS: Useful in 'PRESS ANY KEY TO CONTINUE' applications

COMMAND: POKE 465,0:EXEC &HA64C:X=1024:A=INT(X/256): B=X-(A*256):POKE &H1E7,A:POKE &H1E8,B:EXEC &HA505

RESULT: Loads a ML program from cassette at ANY address

Remark: Set X equal to the desired loading address in the above command

COMMAND: K=-1:OPEN "I",#K,"filename":EXEC 44156

RESULT: Loads a Basic Program saved in ASCII, into memory

REMARKS: Works with cassette files. Use K=1 to load disk files

COMMAND: K=-1:J=255 :FORI=243 TO253:READA\$:POKE I,VAL("&H"+A\$):NEXT:OPEN"I",#K,"filename":POKE 111,J:EXEC 243:CLOSE#K:DATA BD,A1,76,BD,A3,0A,0D,70,27,F6,39

RESULT: Displays the contents of the cassette data file 'filename', on the screen

REMARKS: Same as the DUMP command found in other computers. For disk files, make K=1 and J=1

COMMAND: K=-1:J=255: FORI=243 TO253:READA\$:POKE I,VAL("&H"+A\$):NEXT:OPEN"I",#K,"filename":POKE 111,J:EXEC 243:CLOSE#K:DATA BD,A1,76,BD,A2,BF,0D,70,27,F6,39

RESULT: Displays the contents of the cassette data file 'filename', on the printer

REMARKS: Same as the DUMP command found in other computers. For disk files, make K=1 and J=1

COMMAND: EXEC 44539: A\$=CHR\$(PEEK(135))

RESULT: Waits for a keystroke and returns the key in A\$

REMARKS: Used as a substitute for the following:

10 A\$=INKEY\$:IF A\$="" THEN 10

COMMAND: EXEC 46481:? (PEEK(35)*256+PEEK(36))-(PEEK(33)*256+PEEK(34))

RESULT: Returns the amount of free string space

REMARKS: The amount of free string space is initially set by the 'CLEAR xx' command

COMMAND: EXEC &HACEF: CLEAR

RESULT: Restores a Basic Program lost by a RENUM error

REMARKS: RENUM error occurs when the computer tries to RENUMBER a GOTO or GOSUB statement followed by a line # greater than 63999

COMMAND: CLS:?00,"NO":POKE 65495,0:PRINT00,"YES"

RESULT: Tests if your computer accepts the High Speed Poke

REMARKS: Prints 'YES' if it accepts the Poke, 'NO' if not

COMMAND: <Turn off computer. Put a scotch tape on the leftmost pin of the rompak. Insert Rompak in slot. Turn on computer. The 'EXTENDED BASIC' should appear. Type> POKE 65495,0:Press <Enter>. Type: EXEC 49152

RESULT: Increases the speed of your rompaks

REMARKS: Some rompaks might not work properly under the High Speed Mode

COMMAND: X=PEEK(39)*256+PEEK(40)-30: CLEAR 200,X:X=PEEK(39)*256+PEEK(40)+1:FOR I=X TO X+23:READ A\$:POKE I,VAL("&H"+A\$):NEXT:A=INT(X/256):B=X-(A*256):POKE 114,A:POKE 115,B:DATA 12,BD,82,9C,0F,E3,0F,E4,B6,FF,03,8A,01,B7,FF,03,0F,6F,BD,AD,21,7E,AD,9E

RESULT: Restarts your Basic Program when Reset is pressed

REMARKS: Disk Version of this is in 'DISK SYSTEMS' section

COMMAND: X=PEEK(39)*256+PEEK(40)-50: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+34: READ A\$: POKE I, VAL("&H"+A\$): NEXT: A=INT(X/256): B=X-(A*256): POKE X+5, PEEK(360): POKE X+6, PEEK(361): POKE 360, A: POKE 361, B: DATA 0D, 6F, 27, 03, 7E, 00, 00, 34, 56, 0D, 76, 27, 12, 9E, 88, 8C, 05, E0, 25, 0B, BD, A1, B1, BD, A9, 28, 8E, 04, 00, 9F, 88, 35, 56, 20, E1: POKE &H76, 1

RESULT: Allows single screen LIST / DIR

REMARKS: Divide the command into two statements at DATA. Press any key to move from one screen to the next

COMMAND: POKE &H76, 0

RESULT: Disables the single screen LIST / DIR routine

REMARKS: Use POKE &H76, 1 to reenter routine

COMMAND: RE=3584: B=RE/512: A=1: FOR I= 65478 TO 65490 STEP 2: POKE I-((B AND A)=A), 0: A=A*2: NEXT

RESULT: Relocates the video display area to address defined by variable RE in the command

REMARKS: Change RE to the desired address. Make sure RE is evenly divisible by 512

COMMAND: X=PEEK(39)*256+PEEK(40)-20: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+14: READ A\$: POKE I, VAL("&H"+A\$): NEXT I: EXEC X: DATA 8E, 04, 00, A6, 84, 88, 40, A7, 80, 8C, 05, FF, 23, F5, 39

RESULT: Reverses the text screen

REMARKS: None

COMMAND: DIM RE(200): A=(PEEK(183)*256+PEEK(184))-(PEEK(186)*256+PEEK(187)): A=A/32: X=128+(128*ABS(PEEK(182)=4)): FOR I=0 TO A STEP 21: PUT (0, I)-(X-1, I+20), RE, NOT: NEXT

RESULT: Reverses the current graphics screen

REMARKS: Works with all PMODEs! Takes approx. 5 seconds

COMMAND: POKE &H114, 2: X=PEEK(39)*256+PEEK(40)-30: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+23: READ A\$: POKE I, VAL("&H"+A\$): NEXT: POKE X+5, PEEK(360): POKE X+6, PEEK(361): A=INT(X/256): B=X-(A*256): POKE 360, A: POKE 361, B: DATA 0D, 6F, 27, 03, 7E, 00, 00, 34, 16, B6, 01, 14, 27, 06, 5F, 1F, 01, BD, A7, D3, 35, 16, 20, EC

RESULT: Slows down character printing rate

REMARKS: Very useful to read listings / disk directories. Divide command into two statements at DATA

COMMAND: POKE &H114,x

RESULT: Sets character printing rate

REMARKS: Use in conjunction with the previous routine. x is any # between 1 to 50. 1=slow, 50 = very slow. Make x=0 to disable slow print

COMMAND: X=PEEK(188)*256:FOR I=X TO X+94:READ A\$:POKE I,VAL ("&H"+A\$):NEXT:DATA 0F,78,BD,A5,C5,BD,A6,48,BD,AD,19,BD,A7,7C,9E,19,9F,7E,DC,7E,4C,BD,AC,37,BD,A7,0B,26,0D,96,7C,27,09,96,7C,27,05,2A,E9,7E,A4,EB,BD,A7,E9,9E,7E,9F,76,9E,19,9C,76,24,1C,EC,84,27,1E,33,04,11,93,76,24,11,A6,C0,27,07,11,93,76,24,08,20,F5,EF,84,AE,84,20,E0,6F,80,6F,80,9F,1B,BD,AD,21,7E,AC,73

RESULT: Restores part of cassette based Basic Programs that have been lost by ?IO ERRORS

REMARKS: RUN this program. Cassette users: CSAVEM "TRESTORE", 1536,1536+95,1536. Disk Users: SAVEM "TRESTORE",3584,3584+95,3584. To restore a Basic Program, simply CLOADM or LOADM "TRESTORE". Press PLAY on cassette player, type EXEC and press <ENTER>

HIGH SPEED CASSETTE OPERATION

The following commands will allow you SAVE / LOAD Basic and ML programs at high-speed. For use with Radio Shack Computer Cassette Recorders only.

(1) To save a program at high speed, type POKE 65495,0 and press <ENTER>. Then use the normal CSAVE or CSAVEM command to save program to cassette.

(2) To load:

COMMAND: POKE 65495,0:POKE 143,14:POKE 144,24:POKE 145,6:

RESULT: Sets up the computer for high speed loading

REMARKS: Follow this command by the CLOAD or CLOADM command to load your program from cassette at high speed

COMMAND: POKE 65494,0:POKE 143,PEEK(&HA10D):POKE 144,24:POKE 145, PEEK(&HA10F)

RESULT: Restores computer for regular speed loading

REMARKS: None

PRINTER

COMMAND: BAUD = xxxx: P=INT(55600/BAUD)-(16/3)+.5)+(2* (BAUD=110))-(BAUD=9600):P1=INT(P/256):POKE 149,P1: POKE 150,P-(P1*256)

RESULT: Sets baud rate 110,300,600,1200,2400,4800 or 9600

REMARKS: Substitute xxxx in the command with desired baud rate

COMMAND: X=PEEK(39)*256+PEEK(40)-40: CLEAR 200,X:X=PEEK(39)*256+PEEK(40)+1:FOR I=X TO X+34:READ A\$:POKE I,VAL("&H"+A\$): NEXT:POKE X+11,PEEK(360):POKE X+12,PEEK(361): A=INT(X/256):B=X-(A*256):POKE 360,A:POKE 361,B:DATA 34,02,96,6F,81,FE,27,05,35,02,7E,00,00,35,02,32,62,34,02,96,77,97,96,35,02,7F,FF,D6,BD,A2,BF,7F,FF,D7,39

RESULT: Allows you to operate your printer with the high speed poke

REMARKS: Divide the command into two statements at DATA. After typing in this command, type in the following commands for the appropriate baud rate

COMMAND: POKE 149,1:POKE &H77,242

RESULT: Sets up printer for Baud Rate 110 for use with the High Speed Poke

REMARKS: Use after previous command

COMMAND: POKE 149,1:POKE &H77,180

RESULT: Sets up printer for Baud Rate 300 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 149,0:POKE &H77,87

RESULT: Sets up printer for Baud Rate 600 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 149,0:POKE &H77,41

RESULT: Sets up printer for Baud Rate 1200 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 149,0:POKE &H77,18

RESULT: Sets up printer for Baud Rate 2400 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 149,0:POKE &H77,6

RESULT: Sets up printer for Baud Rate 4800 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 149,0:POKE &H77,1

RESULT: Sets up printer for Baud Rate 9600 for use with the High Speed Poke

REMARKS: See REMARKS for previous command

COMMAND: POKE 360,&H82:POKE 361,&H73

RESULT: Disables the routine which allows printer operation under the High Speed Poke

REMARKS: For ECB Only. For Disk Basic 1.0, use POKE 360,&HCB: POKE 361,&H4A; Disk Basic 1.1 - POKE 360,&HCC:POKE 361,&H1C

COMMAND: X=PEEK(39)*256+PEEK(40)-30: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+21: READ A\$: POKE I, VAL("&H"+A\$): NEXT: POKE X+11, PEEK(360): POKE X+12, PEEK(361): A=INT(X/256): B=X-(A*256): POKE 360, A: POKE 361, B: DATA 34, 02, 96, 6F, 81, FE, 27, 05, 35, 02, 7E, 00, 00, B6, FF, 22, 44, 25, FA, 35, 02, 39

RESULT: Corrects the Bug in Color Basic 1.1 which causes the printer to miss the first character occasionally

REMARKS: Divide the command into two statements at DATA. This routine not necessary for Color Basic 1.2

COMMAND: X=PEEK(39)*256+PEEK(40)-30: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+25: READ A\$: POKE I, VAL("&H"+A\$): NEXT: POKE X+11, PEEK(360): POKE X+12, PEEK(361): A=INT(X/256): B=X-(A*256): POKE 360, A: POKE 361, B: DATA 34, 02, 96, 6F, 81, FE, 27, 05, 35, 02, 7E, CC, 1C, 96, 9C, 91, F3, 25, 05, 86, 0D, BD, A2, BF, 35, 82

RESULT: Allows you to define the right margin for your printer

REMARKS: Divide the command into two statements at DATA. This routine is helpful for setting the right margin so that the printer doesn't print off the PAPER . See next command

COMMAND: POKE &HF3,x

RESULT: Sets the right margin for the previous command

REMARKS: x is the right margin between 10 and 132

COMMAND: POKE 360,&H82:POKE 361,&H73

RESULT: Disables the Right Margin Printer Routine

REMARKS: For ECB Only. For Disk Basic 1.0 - POKE 360,&HCB:POKE 361,&H4A. For Disk Basic 1.1 - POKE 360,&HCC:POKE 361,&H1C

COMMAND: X=PEEK(39)*256+PEEK(40)-60: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: FOR I=X TO X+57: READ A\$: POKE I, VAL("&H"+A\$): NEXT: POKE X+11, PEEK(360): POKE X+12, PEEK(361): A=INT(X/256): B=X-(A*256): POKE 360, A: POKE 361, B: DATA 34, 06, 96, 6F, 81, FE, 27, 05, 35, 06, 7E, 00, 00, A6, E4, BD, A2, BF, 81, 0D, 27, 0B, D6, 9C, C1, 50, 25, 19, 86, 0D, BD, A2, BF, 0C, F4, D6, F4, C1, 3C, 25, 0C, C6, 06, 86, 0D, BD, A2, BF, 5A, 26, FA, 0F, F4, 35, 06, 32, 62, 39: POKE 244, 0

RESULT: Perforation Skip Routine

REMARKS: Divide the command into two statements at DATA. This routine allows your printer to skip over perforations and automatically skip to the next sheet when it reaches the bottom of a sheet

COMMAND: PEEK(244)

RESULT: Returns the row # the printer is printing on

REMARKS: To be used in conjunction with the previous command

COMMAND: POKE 360,&H82:POKE 361,&H73

RESULT: Disables the Perforation Skip Routine

REMARKS: For ECB Only. For Disk Basic 1.0 - POKE 360,&HCB:POKE 361,&H4A. For Disk Basic 1.1 - POKE 360,&HCC:POKE 361,&H1C

COMMAND: 10 FOR I=1024 TO 1535
20 A=PEEK(I):A=A AND 127:IF A>95 THEN A=A-64
30 PRINT #2,CHR\$(A);
40 IF (I+1)/32=INT((I+1)/32) THEN PRINT #2
50 NEXT

RESULT: Text Screen Dump to Printer

REMARKS: RUN this program to dump the current text screen

```

COMMAND: 10 PMODE 4:SCREEN 1,0:POKE 111,254
          20 K=PEEK(111):K=(2*(K=254))+(K=255):      DIM A(192)
          30 X=0:PRINT #K,CHR$(18)
          40 FOR Y=191 TO 0 STEP -1:S=128
          50 S=S+(3*PPOINT(X,Y)):S=S+(12*PPOINT(X+1,Y)):
              S=S+(48*PPOINT(X+2,Y)):S=S+(64*PPOINT(X+3,Y)):A(Y)
              =PPOINT(X+3,Y)
          60 PRINT #K,CHR$(S);CHR$(S);:NEXT:PRINT#K:IF X>=252
              THEN 110
          70 FOR Y=191 TO 0 STEP -1:S=128
          80 S=S+(A(Y)): S=S+(6*PPOINT(X+4,Y)): S=S+(24*PPOINT
              (X+5, Y)): S=S+(96*PPOINT(X+6,Y))
          90 PRINT #K,CHR$(S);CHR$(S);:NEXT:PRINT #K:X=X+7
          100 IF X<256 THEN 40
          110 PRINT#-2,CHR$(30)

```

RESULT: Dumps the PMODE 4 graphics screen to a DMP printer

REMARKS: Before RUNNING this program,make sure you have the graphics screen in memory. Since this dump is in Basic, it takes approx. 15 minutes to print

FOR 64K COMPUTERS ONLY

Note: All the commands listed under this section require the 64K ALL RAM program from Page 61 of our '500 POKES PEEKS 'N EXECS'

COMMAND: X=PEEK(39)*256+PEEK(40)-10: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: A=INT(X/256): B=X-(A*256): POKE 114, A: POKE 115, B: FOR I=X TO X+6: READ A\$: POKE I, VAL("&H"+A\$): NEXT DATA 12, 7F, FF, DF, 7E, 80, C0

RESULT: Sets RESET protection for the ALL RAM MODE

REMARKS: CoCo does not enter the RAM/ROM mode when Reset. Not for disk systems

COMMAND: X=PEEK(39)*256+PEEK(40)-10: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: A=INT(X/256): B=X-(A*256): POKE 114, A: POKE 115, B: FOR I=X TO X+6: READ A\$: POKE I, VAL("&H"+A\$): NEXT DATA 12, 7F, FF, DF, 7E, C0, D4

RESULT: Sets RESET protection for the ALL RAM MODE

REMARKS: CoCo does not enter the RAM/ROM mode when Reset. For Disk Basic 1.0 only

COMMAND: X=PEEK(39)*256+PEEK(40)-10: CLEAR 200, X: X=PEEK(39)*256+PEEK(40)+1: A=INT(X/256): B=X-(A*256): POKE 114, A: POKE 115, B: FOR I=X TO X+6: READ A\$: POKE I, VAL("&H"+A\$): NEXT DATA 12, 7F, FF, DF, 7E, C0, E7

RESULT: Sets RESET protection for the ALL RAM MODE

REMARKS: CoCo does not enter the RAM/ROM mode when Reset. Only for Disk Basic 1.1

COMMAND: POKE &HFFDE, 0

RESULT: Returns to the normal RAM/ROM mode

REMARKS: Useful for returning to normal after 64K ALL RAM MODE

COMMAND: POKE &HFFDF, 0

RESULT: Reenters the 64K ALL RAM MODE after POKE &HFFDE, 0

REMARKS: None

COMMAND: POKE &HA19B, PEEK(&HA262)

RESULT: Creates an invisible cursor

REMARKS: None

COMMAND: POKE 41804,5:POKE 41805,n*32

RESULT: Sets up a text window

REMARKS: Scroll protects top half of the screen and the 'n' # of lines from the bottom half. n can be any # 0 to 6

COMMAND: FOR I =&HAC4C TO &HAC50: POKE I,18:NEXT

RESULT: Disables MOTOR OFF / AUDIO OFF upon error

REMARKS: Can be useful when listening to music through the TV speaker (set through MOTOR ON:AUDIO ON)

COMMAND: POKE &HB816,4

RESULT: Makes Packed Basic Lines visible

REMARKS: Useful for Rainbow (R) One - Liners

COMMAND: POKE &HADF5,12

RESULT: Allows you to pause listings/program through CLEAR

REMARKS: Eliminates pause through the cumbersome SHIFT - @

COMMAND: POKE &H9537,x: PCLS 1

RESULT: Creates multi-colored backgrounds for various PMODEs

REMARKS: Use PCLS 2 instead of PCLS 1 for PMODEs 0 & 1. Try values of x (between 0 and 255) for different patterns

COMMAND: POKE &H968E,18:POKE &H968F,18:POKE &H9690,18:POKE
&H96A3,18:POKE &H96A4,18

RESULT: Allows PCLEAR 0

REMARKS: None

COMMAND: POKE &H9692,15

RESULT: Allows you to PCLEAR from 1 to 14

REMARKS: None

COMMAND: POKE 49152,0:POKE &H134,0:POKE &H139,0: EXEC &HB002

RESULT: Creates an EXTENDED BASIC only system.

REMARKS: Useful for loading most programs from cassette that work in a non-disk environment, without unplugging the disk controller. Erases any Basic Program in memory

COMMAND: POKE 49152,68:EXEC &HB002

RESULT: Returns to normal after the previous command

REMARKS: Erases any Basic Program in memory

COMMAND: POKE &HAD19,126:POKE &HAD1A,&HE0:POKE &HAD1B,0:FOR
I=&HE000 TO &HE01D:READ A\$:POKE I,VAL("&H"+A\$):NEXT:
DATA 8E,E0,17,BD,B9,9C,BD,A1,B1,81,59,26,07,9E,19,6F,
80,7E,AD,1D,7E,AD,33,20,53,55,52,45,3F,00

RESULT: Enhances the NEW command

REMARKS: NEW command prompts with SURE? before erasing the
Basic Program. Prevents accidental erasures

COMMAND: POKE &HA53C,&HE1:POKE &HA53D,0:FORI=&HE100 TO &HE105:
READ A\$:POKE I,VAL("&H"+A\$):NEXT:DATA BD,A7,E9,7E,A5,45

RESULT: Combines the CLOADM and EXEC commands

REMARKS: CLOADM loads and EXECutes a ML program from cassette

COMMAND: FORI=&HE150 TO &HE17A:READ A\$:POKE I,VAL("&H"+A\$):
NEXT: DATA 9E,BA,BF,E1,66,CE,E6,00,A6,80,A7,C0,9C,B7,
23,F8,9E,B7,BF,E1,68,39,00,00,00,00,8E,E6,00,FE,E1,66,
A6,80,A7,C0,11,B3,E1,68,23,F6,39

RESULT: Allows you to hide the current graphics screen
and recall it later

REMARKS: Same as the OOPS command found in other computers.
See next two commands for more info

COMMAND: EXEC &HE150

RESULT: Hides the current graphics screen

REMARKS: To be used in conjunction with the previous command

COMMAND: EXEC &HE16A

RESULT: Restores the hidden graphics screen

REMARKS: To be used in conjunction with the previous two
commands

COMMAND: POKE &HA69B,&HFA:POKE &HA6C7,126:POKE &HA6C8,&HE2:
POKE &HA6C9,00:FORI=&HE200 TO &HE200+&H15:READ A\$:POKE
I,VAL("&H"+A\$):NEXT:DATA 27,11,B6,04,00,81,46,27,06,
88,40,81,46,26,01,39,7E,A6,96,7E,A6,86

RESULT: Enhances the CLOAD / CLOADM command

REMARKS: CLOAD / CLOADM "filename" will continue to look for
'filename' while ignoring ?IO ERRORS in any other
file in the process

COMMAND: POKE &H99FF,&HE2:POKE &H9A00,0:FOR I=&HE200 TO &HE244:
 READ A\$:POKE I,VAL("&H"+A\$):NEXT:DATA 34,76,1F,10,90,
 BA,DD,F5,86,20,97,FD,8D,1F,1F,89,4F,DD,F5,86,02,97,FD,
 8D,14,DC,F7,5D,26,06:DATA 96,FE,97,B5,20,04,96,FF,97,
 B5,35,76,7E,93,77,86,08,97,FC,DC,F5,58,49,91,FD,25,03,
 90,FD,5C,0A,FC,26,F3,1E,89,DD,F7,39

RESULT: Allows 65000 PAINT styles instead of the usual 8

REMARKS: Divide the command into two statements at the second
 DATA statement. See next two commands

COMMAND: POKE 254,a:POKE 255,b:PAINT (x,y),0,c

RESULT: PAINTS starting at coordinate x,y with the pattern
 defined by 'a' and 'b' till it hits border 'c'

REMARKS: To be used in conjunction with the previous command.
 Try different values of 'a' and 'b' for different
 patterns

COMMAND: POKE &H99FF,&H93:POKE &H9A00,&H77

RESULT: Restores normal PAINT

remarks: None

The next eight POKES are Problem Pokes for various ROMPAKs. They are
 to be used in conjunction with the ROMPAK TRANSFER program from Page
 65 of our 500 POKES PEEKS 'N EXECs. Type in the appropriate POKES in
 statement 145 of Program Listing 1. Note: The names of these Rompaks
 are registered trademarks of the Tandy Corporation.

COMMAND: X=20895:POKE X,142:POKE X+1,159:POKE X+2,254:POKE
 X+3,191:POKE X+4,PEEK(&H8A):POKE X+5,96:POKE X+6,57

RESULT: Patches the SPECTACULATOR (R) Rompak

REMARKS: None

COMMAND: POKE 16487,62:POKE 16488,128

RESULT: Patches the MICRO PAINTER (R) Rompak

REMARKS: None

COMMAND: POKE 19465,PEEK(&H8A)+57

RESULT: Patches the REACTOIDS (R) Rompak

REMARKS: None

COMMAND: A=PEEK(PEEK(114)*256+PEEK(115)):POKE 17444,A:POKE
17445,A

RESULT: Patches the CANYON CLIMBER (R) Rompak

REMARKS: None

COMMAND: A=PEEK(PEEK(114)*256+PEEK(115)):POKE 17851,A:POKE
17852,A

RESULT: Patches the MICROBES (R) Rompak

REMARKS: None

COMMAND: A=PEEK(PEEK(114)*256+PEEK(115)):POKE 20772,A:POKE
20773,A

RESULT: Patches the SLAY THE NERIES (R) Rompak

REMARKS: None

COMMAND: A=PEEK(PEEK(114)*256+PEEK(115)):Y=22141:FOR I=Y TO
Y+3:POKE I,18:NEXT

RESULT: Patches the MEGABUG (R) Rompak

REMARKS: None

COMMAND: A=PEEK(PEEK(114)*256+PEEK(115)):B=16421:POKEB,A:POKE
B+1,A:POKE B+47,A:POKE B+48,A:POKEB+49,A:B=22646:POKE
B,A:POKEB+1,A:POKE B+29,A:POKE B+30,A:B=23778:POKEB,A:
POKE B+1,A:B=17565:POKE B,A:POKE B+1,A:POKE B+1424,A:
POKE B+1425,A:POKE B+1500,A:POKE B+1501,A

RESULT: Patches the DOWNLAND (R) Rompak

REMARKS: None

ROMPAK TRANSFER TO DISK

This procedure is to be used with the ROMPAK TRANSFER program
on Page 65 of 500 POKES PEEKS 'N EXECS.

First, transfer the ROMPAK to cassette as described on Page 64. Then,
turn off computer, plug in disk controller, turn on computer, rewind
cassette and type: CLEAR 200,16384:CLOADM "FILENAME",&H8000: When the
program loads, insert disk in Drive 0 and type:
SAVEN"FILENAME",16384,32767,0. Then make the following changes to the
PROGRAM LISTING 1 and save the modified PROGRAM LISTING 1 to disk:

```
140 INPUT "FILENAME";FI$:LOADM FI$
150 POKE 243,254:POKE 244,255:POKE &HFF40,0
```

COMMAND: POKE 52152,PEEK(33376)

RESULT: Corrects the bug in the COPY COMMAND

REMARKS: For Disk Basic 1.1. Now the COPY function does not lock up when it encounters an error

COMMAND: POKE 51942,PEEK(33376)

RESULT: Corrects the bug in the COPY COMMAND

REMARKS: For Disk Basic 1.0. See REMARKS for previous command

COMMAND: POKE &HD66F,x

RESULT: Determines how many times the computer will try to read the disk before it issues an error

REMARKS: For Disk Basic 1.0. x is # of tries between 2 to 5

COMMAND: POKE &HD762,x

RESULT: Determines how many times the computer will try to read the disk before it issues an error

REMARKS: For Disk Basic 1.1. x is # of tries between 2 to 5

COMMAND: POKE &HD6CD,0:POKE &HD723,23

RESULT: Sets up disk drive for 30 ms step rate

REMARKS: For Disk Basic 1.0. Some drives, especially Radio Shack drives, might not work with lower step rates

COMMAND: POKE &HD6CD,0:POKE &HD723,22

RESULT: Sets up disk drive for 20 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE &HD6CD,0:POKE &HD723,21

RESULT: Sets up disk drive for 12 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE &HD6CD,0:POKE &HD723,20

RESULT: Sets up disk drive for 6 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE &HD7C0,0:POKE &HD816,23

RESULT: Sets up disk drive for 30 ms step rate

REMARKS: For Disk Basic 1.1. Some drives, especially Radio Shack drives, might not work with lower step rates

COMMAND: POKE &HD7C0,0:POKE &HD816,22

RESULT: Sets up disk drive for 20 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE &HD7C0,0:POKE &HD816,21

RESULT: Sets up disk drive for 12 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE &HD7C0,0:POKE &HD816,20

RESULT: Sets up disk drive for 6 ms step rate

REMARKS: See REMARKS for previous command

COMMAND: POKE 243,&HCC:POKE 244,&H41:POKE 245,&H42:POKE 246,
&HFD:POKE 247,&HD7:POKE 248,&HAC:POKE 249,57:EXEC 243

RESULT: Allows use of double sided disk drives

REMARKS: For Disk Basic 1.0. Drive 2 becomes the other side of
Drive 0, Drive 3 the other side of Drive 1

COMMAND: POKE 243,&HCC:POKE 244,&H41:POKE 245,&H42:POKE 246,
&HFD:POKE 247,&HD8:POKE 248,&H9F:POKE 249,57:EXEC 243

RESULT: Allows use of double sided disk drives

REMARKS: For Disk Basic 1.1. Drive 2 becomes the other side of
Drive 0, Drive 3 the other side of Drive 1

The next 16 commands are for use of 40 track disk drives. The first 8
POKEs are for Disk Basic 1.0 and the next are for Disk Basic 1.1.
These commands allow you an extra 22K of disk storage space on your 40
track drive. However, please note that a maximum of three 40 track
drives can be used with the CoCo

COMMAND: POKE 50952,78

RESULT: Patches the KILL command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 50986,84:POKE 51083,78

RESULT: Patches the FAT for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 51104,78:POKE 51135,78:POKE 52300,78

RESULT: Patches the GAT for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 52697,78

RESULT: Patches the FREE command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 53680,40

RESULT: Patches the BACKUP command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 54111,78

RESULT: Patches the COPY command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 54342,39

RESULT: Patches the DSKI\$/DSK0\$ command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 54642,40:POKE 54677,40

RESULT: Patches the DSKINI command for 40 track drives

REMARKS: For Disk Basic 1.0

COMMAND: POKE 50997,78

RESULT: Patches the KILL command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 51034,84:POKE 51131,78

RESULT: Patches the FAT for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 51183,78:POKE 51152,78:POKE 52518,78

RESULT: Patches the GAT for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 52917,78

RESULT: Patches the FREE command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 53917,40

RESULT: Patches the BACKUP command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 54349,78

RESULT: Patches the COPY command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 54580,39

RESULT: Patches the DSKI\$/DSK0\$ command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE 54879,40:POKE 54914,40

RESULT: Patches the DSKINI command for 40 track drives

REMARKS: For Disk Basic 1.1

COMMAND: POKE &HCF1C,19:POKE&HCF1D,&HE2:FORI=&HE300 TO &HE308:
 READA\$:POKE I,VAL("&H"+A\$):NEXT:DATA 7F,FF,40,BD,A4,
 2D,7E,A5,45

RESULT: Combines the LOADM and EXEC commands

Remarks: LOADM loads and EXECs a ML program. For Disk Basic 1.0

COMMAND: POKE &HCFF8,&H13:POKE &HCFF9,6:FOR I=&HE300 TO &HE308:
 READA\$:POKE I,VAL("&H"+A\$):NEXT:DATA 7F,FF,40,BD,A4,
 2D,7E,A5,45

RESULT: Combines the LOADM and EXEC commands

REMARKS: LOADM loads and EXECs a ML program. For Disk Basic 1.1

COMMAND: FORI=&HD262 TO &HD265:POKE I,18:NEXT:POKE &HD26B,&H4F

RESULT: Uses default drive # when BACKUP is not followed by a
 drive #

REMARKS: For Disk Basic 1.1

COMMAND: FORI=&HD175 TO &HD178:POKE I,18:NEXT:POKE &HD17E,&H62

RESULT: Uses default drive # when BACKUP is not followed by a
 drive #

REMARKS: For Disk Basic 1.0

COMMAND: POKE &HD625,126:POKE &HD626,&HE3:POKE &HD627,&H50:
 FORI=&HE350 TO &HE35F:READ A\$:POKE I,VAL("&H"+A\$):
 NEXT:DATA 4F,D6,EC,BD,BD,CC,BD,B9,58,10,8E,FF,4B,7E,
 D6,29

RESULT: DSKINI displays the track it is currently initializing

REMARKS: For Disk Basic 1.1

COMMAND: POKE &HD538,126:POKE &HD539,&HE3:POKE &HD53A,&H50:
 FORI=&HE350 TO &HE35F:READ A\$:POKE I,VAL("&H"+A\$):
 NEXT:DATA 4F,D6,EC,BD,BD,CC,BD,B9,58,10,8E,FF,4B,7E,
 D5,3C

RESULT: DSKINI displays the track it is currently initializing

REMARKS: For Disk Basic 1.0

This procedure will let you LOAD and RUN most of those 'Cassette Only' Basic Programs from disk. First, transfer the Basic Program from cassette to disk. Then, set the 64K ALL RAM MODE as described on Page 61 of our 500 POKES PEEKS 'N EXECs. LOAD the Basic Program disk and type in the following command:

COMMAND: POKE &H134,0:POKE &H139,0:POKE 49152,0:POKE 248,PEEK(25):POKE 249,PEEK(27):POKE 250,PEEK(28):EXEC &H8002

RESULT: Puts the computer in EXTENDED BASIC ONLY mode and preserves the Basic Program in memory

REMARKS: None

Then, type this command:

COMMAND: POKE 25,PEEK(248):POKE 27,PEEK(249):POKE 28,PEEK(250):
LIST

RESULT: Recovers the Basic Program

REMARKS: None

If the Basic Program requires a POKE 25,6:NEW before it loads, type in the following commands; otherwise type: PCLEAR 4:RUN

COMMAND: POKE &H968E,18:POKE &H968F,18:POKE &H9690,18:POKE
&H96A3,18:POKE &H96A4,18:PCLEAR 0:RUN

RESULT: Sets PCLEAR 0 and RUNs the program

REMARKS: None

DISK SYSTEMS

COMMAND: POKE 2376,9:POKE 2378,10:POKE 2377,&H89:POKE 2379,&H89
 RESULT: Prevents ?OB ERROR message after COPY error
 REMARKS: Type in this command AFTER the COPY error

COMMAND: PEEK(&HC155)
 RESULT: Returns 49 in Disk Basic 1.1
 REMARKS: Used to ascertain between Disk ROMs

COMMAND: PEEK (&HC155)
 RESULT: Returns a <>49 number in Disk Basic 1.0
 REMARKS: Used to ascertain between Disk ROMs

COMMAND: SAVEM"TEXT",1024,1535,PEEK(114)*256+PEEK(115)
 RESULT: Saves the current text screen to disk
 REMARKS: Use LOADM"TEXT" to load screen back from disk

COMMAND: SAVEM"GRAPHICS",3584,PEEK(183)*256,44539
 RESULT: Saves the current graphics screen to disk
 REMARKS: Use LOADM "GRAPHICS" to load screen back from disk

COMMAND: PEEK (&HEC)
 RESULT: If used after a DSKINI error, it returns the track #
 where the error occurred
 REMARKS: See next command

COMMAND: PEEK (&HED)
 RESULT: If used after a DSKINI error, it returns the sector #
 where the error occurred
 REMARKS: None

COMMAND: CLEAR 200,32766:POKE 25,14:POKE 3584,0:NEW
 RESULT: COPY command requires fewer SWAPS with larger files
 REMARKS: Erases any Basic Program in memory

COMMAND: A=2000:EXEC 44609 A:DSKI\$ 0,0,1,A\$,B\$
 RESULT: Restores head to track 0 on Drive 0
 REMARKS: Use before turning off computer. Next time you turn on
 the computer and type DIR, the disk drive head will
 not restore to track 0. Prolongs the life of your drive

COMMAND: A=2000:EXEC 44609 A:DSKI\$ 1,0,1,A\$,B\$

RESULT: Restores head to track 0 on Drive 1

REMARKS: Use before turning off computer. Next time you turn on the computer and type DIR, the disk drive head will "bang" to track 0. Prolongs the life of your drive

COMMAND: A=2000:EXEC 44609 A:DSKI\$ 2,0,1,A\$,B\$

RESULT: Restores head to track 0 on Drive 2

REMARKS: See REMARKS for previous command

COMMAND: A=2000:EXEC 44609 A:DSKI\$ 3,0,1,A\$,B\$

RESULT: Restores head to track 0 on Drive 3

REMARKS: See REMARKS for previous command

COMMAND: UNLOAD:OPEN"D",#1,"filename/bas",1:FIELD #1,1 AS A\$: GET #1,2:A=ASC(A\$):GET #1,3:A=A*256+ASC(A\$):PRINT" LENGTH ="A: EXEC &HA426

RESULT: Gives LENGTH of Basic Program on disk

REMARKS: Substitute 'filename' with the appropriate filename

COMMAND: 10 UNLOAD:OPEN"D",#1,"filename/bin",1:FIELD #1,1 AS A\$:P=1
20 GET #1,P+1:A=ASC(A\$):GET #1,P+2:A=A*256+ASC(A\$):
P=P+A+5:GET #1,P:IF ASC(A\$)<>255 THEN 20
30 GET #1,P+3:A=ASC(A\$):GET #1,P+4:A=A*256+ASC(A\$):
PRINT "EXEC ="A:EXEC &HA426

RESULT: Gives EXEC address of ML program on disk

REMARKS: Substitute 'filename' with the appropriate filename
RUN this program to achieve the RESULT

COMMAND: UNLOAD: OPEN"D",#1,"filename/bin",1:FIELD #1, 1 AS A\$:P=1:GET #1,P+1:A=ASC(A\$):GET #1,P+2:A=A*256+ASC(A\$):GET #1,P+3:B=ASC(A\$):GET #1,P+4:B=B*256+ASC(A\$):
PRINT"START ="B;:? TAB(15)" END ="A+B-1:EXEC &HA426

RESULT: Gives the START / END address of ML program on disk

REMARKS: Substitute 'filename' with appropriate filename. For ML programs that do NOT have multiple start addresses

COMMAND: 10 UNLOAD:OPEN"D",#1,"filename/bin",1:FIELD #1,1 AS A\$:P=1

20 GET #1,P+1:A=ASC(A\$):GET #1,P+2:A=A*256+ASC(A\$):
GET #1,P+3:B=ASC(A\$):GET #1,P+4:B=B*256+ASC(A\$):
PRINT "START ="B;:TAB(15)" END ="A+B-1:P=P+A+5:
GET #1,P:IF ASC(A\$)<>255 THEN 20 ELSE EXEC &HA426

RESULT: Gives the START / END address of a ML program on disk

REMARKS: Substitute 'filename' with appropriate filename. For ML programs that do/don't have multiple start addresses. RUN this program to achieve the RESULT

COMMAND: UNLOAD: OPEN"D",#1,"filename/bin",1:FIELD #1,1 AS A\$:
X=xxxx:A=INT(X/256):B=X-(A*256):LSET A\$=CHR\$(A):PUT
#1,4:LSET A\$=CHR\$(B):PUT #1,5:EXEC &HA426

RESULT: Changes the start address of a ML program on disk

REMARKS: Substitute 'filename' with appropriate filename. Not for files with multiple start addresses. Substitute xxxx with the desired start address

COMMAND: SAVE"filenam"+CHR\$(PEEK(138)+143)

RESULT: Saves a Basic Program on disk with simple protection

REMARKS: Substitute 'filenam' with appropriate 7 letter filename. Although the file appears normal when you DIR, it can only be loaded by the next command

COMMAND: LOAD "filenam"+CHR\$(PEEK(138)+143)

RESULT: Loads a .protected Basic Program from disk

REMARKS: Substitute 'filenam' with appropriate filename. To be used in conjunction with the previous command

COMMAND: A\$="filename/ext":EXEC 51512 A\$:EXEC &HC6BC:A=PEEK(&H973)

RESULT: Tests to see if the filename 'A\$' exists on disk

REMARKS: For Disk Basic 1.1. If filename is not found, then A=0; if found, then A is a non zero number

COMMAND: A\$="filename/ext":EXEC 51338 A\$:EXEC &HC65F:A=PEEK(&H973)

RESULT: Tests to see if the filename 'A\$' exists on disk

REMARKS: For Disk Basic 1.0. If filename not found, then A=0; if found, then A is a non zero number

COMMAND: POKE 234,2:POKE 238,6:POKE 239,0:FOR I=0 TO 34:FOR J=1 TO 18:POKE 236,I:POKE 237,J:EXEC PEEK(&HC004)*256+PEEK(&HC005):IF PEEK(240)<>0 THEN ?"TRACK" I "SECTOR" J:NEXT J,I ELSE NEXT J,I

RESULT: Verifies disk and lists all bad track/sectors

REMARKS: None

COMMAND: X=PEEK(39)*256+PEEK(40)-40: CLEAR 200,X:X=PEEK(39)*256+PEEK(40)+1:FOR I=X TO X+29:READ A\$:POKE I,VAL("&H"+A\$):NEXT:A=INT(X/256):B=X-(A*256):POKE 114,A:POKE 115,B:DATA 12,BD,C0,F0,BD,D2,D2,BD,82,9C,0F,E3,0F,E4,B6,FF,03,8A,01,B7,FF,03,0F,6F,BD,AD,21,7E,AD,9E

RESULT: Restarts your Basic Program when Reset is pressed

REMARKS: For Disk Basic 1.1. Divide the command into two statements at DATA

COMMAND: POKE 114,&HC0:POKE 115,&HE7

RESULT: Restores normal RESET

REMARKS: For Disk Basic 1.1

COMMAND: X=PEEK(39)*256+PEEK(40)-40: CLEAR 200,X:X=PEEK(39)*256+PEEK(40)+1:FOR I=X TO X+29:READ A\$:POKE I,VAL("&H"+A\$):NEXT:A=INT(X/256):B=X-(A*256):POKE 114,A:POKE 115,B:DATA 12,BD,C0,DD,BD,D1,E5,BD,82,9C,0F,E3,0F,E4,B6,FF,03,8A,01,B7,FF,03,0F,6F,BD,AD,21,7E,AD,9E

RESULT: Restarts your Basic Program when Reset is pressed

REMARKS: For Disk Basic 1.0. Divide the command into two statements at DATA

COMMAND: POKE 114,&HC0:POKE 115,&HD4

RESULT: Restores normal RESET

REMARKS: For Disk Basic 1.0

COMMAND: A=2000:EXEC 44609 A:DSKI\$0,17,2,A\$,B\$:DSK0\$0,17,1,A\$,B\$:FOR I=3 TO 10:DSKI\$0,17,I,A\$,B\$:DSK0\$0,17,I+8,A\$,B\$:NEXT

RESULT: Keeps a spare copy of the directory on Track 17

REMARKS: Helpful when directory crashes. See next command.
Only for disks with less than 60 files

COMMAND: A=2000:EXEC 44609 A:DSKI\$0,17,1,A\$,B\$:DSK0\$0,17,2,
A\$,B\$:FOR I=3 TO 10:DSKI\$0,17,I+8,A\$,B\$:DSK0\$0,17,I,
A\$,B\$:NEXT

RESULT: Restores directory

REMARKS: To be used in conjunction with previous command.
Only for disks with less than 60 files

The last two commands allow you to scramble the disk directory so that other users may not be able to use the disk. The first command scrambles the directory. To tell if the directory is scrambled, type: DIR. If the program PROTECT/BIN is displayed (in lowercase), then the disk is scrambled. DO NOT save any programs to the scrambled disk. To restore the directory, type use the second command. Do NOT use these commands if you are keeping a spare directory on Track 17.

COMMAND: CLEAR 2000:SAVEM"protect/bin",243,243,243:DSKI\$0,17,
2,A\$,B\$:DSK0\$0,17,1,A\$,B\$:A\$=STRING\$(128,255):B\$=A\$:
DSK0\$0,17,2,A\$,B\$:DIR PEEK(235)

RESULT: Scrambles the disk directory

REMARKS: See next command. 'protect/bin' should be typed in
lowercase

COMMAND: CLEAR 2000:DSKI\$0,17,1,A\$,B\$:DSK0\$0,17,2,A\$,B\$:KILL"
protect/bin"

RESULT: Unscrambles the scrambled directory

REMARKS: See previous command

ENHANCEMENTS

EDTASM + (R) Disk Version

COMMAND: LOADM"EDTASM":POKE 15364,57:SAVEM"EDTASM",5632,19071,5632

RESULT: Patches the FCC command in the EDTASM+

REMARKS: Only the ASCII equivalent of the first character of the FCC string is printed. Saves paper when listing to printer

COMMAND: LOADM"EDTASMOV":POKE 16456,57:SAVEM"EDTASMOV",5632,20863,5632

RESULT: Patches the FCC command in the EDTASMOV program

REMARKS: See REMARKS for previous command

COCO MAX (R)

COMMAND: POKE 20347,PEEK(138)+224

RESULT: Changes graphics screen to PMODE 3

REMARKS: None

COMMAND: POKE 20347,PEEK(138)+255

RESULT: Returns to normal after previous command

REMARKS: None

COMMAND: POKE 18729,x

RESULT: Changes the radius of edges in rounded box icon

REMARKS: Use values of x between 12 and 40

COMMAND: POKE &H5C09,33

RESULT: Changes the action of pull down menus

REMARKS: None

COMMAND: POKE 22283,ASC("B"):POKE 22284,ASC("I"):POKE 26880,ASC("I"):POKE 26881,ASC("N"):POKE 27017,ASC("B")

RESULT: Replaces the MAX extension with BIN

REMARKS: Add these statements to the Basic Loader. From now, all graphics screens will be saved to disk under the extension BIN

COMMAND: POKE 32767,x

RESULT: Moves the left margin of drawing window x spaces to the left

REMARKS: None

TELEWRITER - 64 (R)

COMMAND: POKE 12525,240

RESULT: Changes the screen color for 16/32K Cassette Version

REMARKS: Add this POKE to the Basic Loader (after the CLOADM
" ",OF command in statement 59)

COMMAND: POKE 12525,248

RESULT: Restores normal screen color for 16/32K Cass Version

REMARKS: See REMARKS for previous command

COMMAND: POKE 61125,240

RESULT: Changes the screen color for 64K Cassette Version

REMARKS: See REMARKS for previous command

COMMAND: POKE 61125,248

RESULT: Restores normal screen color for 64K Cass. Version

REMARKS: See REMARKS for previous command

COMMAND: POKE 12732,240

RESULT: Changes the screen color for 16/32K Disk Version

REMARKS: Add this POKE to the Basic Loader (after the
LOADM"TW64",OF command in statement 200)

COMMAND: POKE 12732,248

RESULT: Restores normal screen color for 16/32K Disk Version

REMARKS: See REMARKS for previous command

COMMAND: POKE 61262,240

RESULT: Changes screen color for 64K Disk Version

REMARKS: See REMARKS for previous command

COMMAND: POKE 61262,248

RESULT: Restores normal screen color for 64K Disk Version

REMARKS: See REMARKS for previous command

The next commands allow you to define the format values of various parameters to the ones you use most often. Add the POKE(s) to statements 306,307 or 308 of the Basic Loader for the Disk Version

COMMAND: POKE &H96,x

RESULT: Sets default Baud Rate

REMARKS: x is the Baud Rate value.

COMMAND: POKE &HB4,0

RESULT: Turns off Auto Page Numbering

REMARKS: None

COMMAND: POKE &HB4,1

RESULT: Turns on Auto Page Numbering

REMARKS: None

COMMAND: POKE &HC6,x

RESULT: Sets Top Margin to 'x'

REMARKS: None

COMMAND: POKE &HD2,x

RESULT: Sets # of Lines Per Page to 'x'

REMARKS: None

COMMAND: POKE &HD5,x

RESULT: Sets Line Spacing to 'x'

REMARKS: None

COMMAND: POKE &HF3,x

RESULT: Sets Bottom Margin to 'x'

REMARKS: None

COMMAND: POKE &HFD,x

RESULT: Sets Line Width to 'x'

REMARKS: None

COMMAND: POKE &HFF,x

RESULT: Sets Left Margin to 'x'

REMARKS: None

COMMAND: POKE &H102,x

RESULT: Sets Page Number Placement to 'x'

REMARKS: Sets the 'WHERE' parameter in the Format Menu

COMMAND: POKE &H11A,0

RESULT: Sets Lowercase

REMARKS: None

COMMAND: POKE &H11A,255

RESULT: Sets Uppercase

REMARKS: None

COMMAND: POKE &H3EE,0

RESULT: Turns off Single Sheet Printer Pause

REMARKS: None

COMMAND: POKE &H3EE,1

RESULT: Turns on Single Sheet Printer Pause

REMARKS: None

COMMAND: POKE &H3FA,0

RESULT: Turns off Right Justify

REMARKS: None

COMMAND: POKE &H3FA,1

RESULT: Turns on Right Justify

REMARKS: None

EDTASM + is a trademark of the TANDY CORPORATION. COCO MAX is a trademark the COLORMARE. TELEWRITER - 64 is a trademark of COGNITEC.

GAMES

Note: Type in these POKES AFTER '(C)LOADM'ing the game and BEFORE typing 'EXEC'.

COMMAND: POKE &H1D77,255

RESULT: The invaders throw fewer bombs at your ship in Space Invaders

REMARKS: None

COMMAND: POKE 7690,88

RESULT: Speeds up Colorpede (R)

REMARKS: If you think you have mastered Colorpede (R), try this POKE!

COMMAND: POKE 7689,0

RESULT: Slows down Colorpede (R)

REMARKS: None

COMMAND: POKE 11271,203

RESULT: Improves keyboard reponse in 'The Frog' (R)

REMARKS: For disk systems. Might work with cassette

COMMAND: POKE 18888,23

RESULT: The barrells stop coming down after the first one hits the 'OIL' tank in Donkey King (R)

REMARKS: None

COMMAND: POKE &H3693,x

RESULT: Gives 'x' # of lives in Bag-It-Man (R)

REMARKS: None

COMMAND: POKE &H5439,x

RESULT: Gives 'x' # of lives in Mr. Dig (R)

REMARKS: None

COMMAND: POKE &H5761,x

RESULT: Gives 'x' # of lives in Lunar Rover Patrol (R)

REMARKS: None

For those with the EDTASM+ assembler and a autostart version of Lunar Rover Patrol (R), try the next command

COMMAND: <Turn off computer, insert EDTASM+ Rompak, turn on computer, type Z and press <ENTER>, B and press <ENTER>, L LUN-ROV1 and press <ENTER> twice, type XC4 and press <ENTER>, type G9F and press <ENTER>, type I10 and press <ENTER>, type 22369/ and type the number of ships you want and press <ENTER> Type C and press <ENTER>

RESULT: Gives you 'x' # of lives in Lunar Rover Patrol (R)

REMARKS: None

COMMAND: POKE &H73BD,x

RESULT: Gives 'x' # of lives in Mudpies (R)

REMARKS: None

COMMAND: POKE &H441D,x

RESULT: Gives 'x' # of lives in Tutankam (R)

REMARKS: None

COMMAND: POKE &H2052,x:POKE &H207E,x

RESULT: Gives 'x' # of lives in Zeus (R)

REMARKS: None

COMMAND: <Turn on computer, type: POKE 25,100:POKE 25600,0:NEW and press <ENTER>. Then load Bedlam, Raaka-Tu or Pyramid and type in the following:

FOR I=1536 TO 16384:PRINT CHR\$(PEEK(I));:NEXT

RESULT: Lists commands available in these adventures

REMARKS: Garbage will appear in the beginning but the commands will appear by the end

The names of the various arcade games used in this section are Trademarks of different companies and have been included for the sake of easy comprehension.

"MUST" BOOKS

UNRAVELLED SERIES: These books provide a complete annotated listing of the BASIC/ECB/SUPER ECB & DISK ROMs.

EXTENDED COLOR BASIC UNRAVELLED	\$39.95
DISK BASIC UNRAVELLED	\$19.95
BOTH UNRAVELLED BOOKS	\$49.95
SUPER ECB (COCO3) UNRAVELLED	\$24.95
ALL 3 UNRAVELLED BOOKS	\$59.95

BASIC PROGRAMMING TRICKS	\$14.95
COCO 3 SECRETS REVEALED	\$19.95
COCO 3 TECHNICAL MANUAL	\$39.95

INSIDE OS-9 LEVEL II	\$39.95
ASSEMBLY LANGUAGE PROGRAMMING	\$18.00

500 POKES PEEKS 'N EXECS	\$16.95
300 POKES PEEKS 'N EXECS for	
CoCo 3	\$19.95
UTILITY ROUTINES (VOL I) BOOK	\$19.95

TO ORDER: VISA, MC, AMEX, CHECK or MO. Please add \$3.00 shipping and handling. Foreign orders please add \$5.00 S&H. NYS residents please add sales tax. Immediate shipment.

MICROCOM SOFTWARE
PO BOX 214
FAIRPORT, NY 14450
PH: (716)223-1477

FOR ORDERS CALL TOLL FREE 1-800-654-5244

